```
RRRRRRRRRRRR     MMM         MMM     SSSSSSSSSSSS
RRRRRRRRRRRR     MMM         MMM     SSSSSSSSSSSS
RRRRRRRRRRRR     MMM         MMM     SSSSSSSSSSSS
RRR         RRR  MMMMMM   MMMMMM  SSS
RRR         RRR  MMMMMM   MMMMMM  SSS
RRR         RRR  MMMMMM   MMMMMM  SSS
RRR         RRR  MMM   MMM   MMM  SSS
RRR         RRR  MMM   MMM   MMM  SSS
RRR         RRR  MMM   MMM   MMM  SSS
RRRRRRRRRRRR     MMM         MMM     SSSSSSSSS
RRRRRRRRRRRR     MMM         MMM     SSSSSSSSS
RRRRRRRRRRRR     MMM         MMM     SSSSSSSSS
RRR   RRR        MMM         MMM              SSS
RRR   RRR        MMM         MMM              SSS
RRR   RRR        MMM         MMM              SSS
RRR      RRR     MMM         MMM              SSS
RRR      RRR     MMM         MMM              SSS
RRR      RRR     MMM         MMM              SSS
RRR         RRR  MMM         MMM  SSSSSSSSSSSS
RRR         RRR  MMM         MMM  SSSSSSSSSSSS
RRR         RRR  MMM         MMM  SSSSSSSSSSSS
```

```
                                                            C 15
**FILE**ID**RMORSET




RRRRRRRR    MM      MM    OOOOOO    RRRRRRRR      SSSSSSSS  EEEEEEEEEE  TTTTTTTTTT
RRRRRRRR    MM      MM    OOOOOO    RRRRRRRR      SSSSSSSS  EEEEEEEEEE  TTTTTTTTTT
RR      RR  MMMM  MMMM  OO      OO  RR      RR  SS          EE              TT
RR      RR  MMMM  MMMM  OO      OO  RR      RR  SS          EE              TT
RR      RR  MM  MM  MM  OO    OOOO  RR      RR  SS          EE              TT
RR      RR  MM  MM  MM  OO    OOOO  RR      RR  SS          EE              TT
RRRRRRRR    MM      MM  OO  OO  OO  RRRRRRRR      SSSSSS    EEEEEEEE        TT
RRRRRRRR    MM      MM  OO  OO  OO  RRRRRRRR      SSSSSS    EEEEEEEE        TT
RR  RR      MM      MM  OOOO    OO  RR  RR              SS  EE              TT
RR  RR      MM      MM  OOOO    OO  RR  RR              SS  EE              TT
RR    RR    MM      MM  OO      OO  RR    RR            SS  EE              TT           ....
RR    RR    MM      MM  OO      OO  RR    RR            SS  EE              TT           ....
RR      RR  MM      MM    OOOOOO    RR      RR  SSSSSSSS    EEEEEEEEEE      TT           ....
RR      RR  MM      MM    OOOOOO    RR      RR  SSSSSSSS    EEEEEEEEEE      TT           ....


LL            IIIIII      SSSSSSSS
LL            IIIIII      SSSSSSSS
LL              II      SS
LL              II      SS
LL              II      SS
LL              II      SS
LL              II        SSSSSS
LL              II        SSSSSS
LL              II              SS
LL              II              SS
LL              II              SS
LL              II              SS
LLLLLLLLLL    IIIIII    SSSSSSSS
LLLLLLLLLL    IIIIII    SSSSSSSS
```

```
RMO
Pse



PSE
---
.
RMS
$AB



Pha
---
Int
Com
Pas
Sym
Pas
Sym
Pse
Cro
Ass

The
422
The
401
21



Mac
---
_$A
-$A
-$A
TOT

904

The

MAC
```

Table of contents

```
    (3)         66          DECLARATIONS
    (4)         91          RM$RSET - COMMON SETUP FOR RAB FUNCTION ROUTINE
```

```
0000            $BEGIN  RMORSET,000,RM$RMS0,<SETUP FOR A RAB FUNCTION>,<NOWRT,QUAD>
0000
0000     ;
0000     ;****************************************************************************
0000     ;*                                                                          *
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0000     ;*                                                                          *
0000     ;*                                                                          *
0000     ;****************************************************************************
0000     ;
```

```
0000    ;++
0000    ; Facility: rms32
0000    ;
0000    ; Abstract:
0000    ;               routine to perform common setup for a rab function
0000    ;
0000    ; Environment:
0000    ;               star processor running starlet exec.
0000    ;
0000    ; Author: L F Laverdure,        creation date: 5-JAN-1977
0000    ;
0000    ; Modified By:
0000    ;
0000    ;       V03-005 RAS0269         Ron Schaefer            21-Mar-1984
0000    ;               Improve performance by not performing the useless
0000    ;               probe of the ERR= or SUC= routines here.
0000    ;               Arglist gets probed when those routines are used anyway.
0000    ;
0000    ;       V03-004 DAS0001         David Solomon           2-Feb-1984
0000    ;               Don't call RM$RAISE_LOCK unless sharing.
0000    ;
0000    ;       V03-003 KBT0487         Keith B. Thompson       2-Feb-1983
0000    ;               Don't take the file lock out for ISAM
0000    ;
0000    ;       V03-002 KBT0318         Keith B. Thompson       8-Sep-1982
0000    ;               Remove all S0 sharing code
0000    ;
0000    ;       V03-001 KBT0215         Keith B. Thompson       23-Aug-1982
0000    ;               Reorganize psects
0000    ;
0000    ;       V02-017 CDS0001         C Saether       10-Dec-1981
0000    ;               Rename psect.
0000    ;
0000    ;       V02-016 REFORMAT        P S Knibbe      23-Jul-1980
0000    ;
0000    ;--
0000
```

```
0000            .SBTTL  DECLARATIONS
0000
0000    ;
0000    ; Include Files:
0000    ;
0000
0000    ;
0000    ; Macros:
0000    ;
0000
0000            $IMPDEF
0000            $RABDEF
0000            $IRBDEF
0000            $IFBDEF
0000            $RMSDEF
0000
0000    ;
0000    ; Equated Symbols:
0000    ;
0000
0000    ;
0000    ; Own Storage:
0000    ;
0000
```

```
0000            .SBTTL  RM$RSET - COMMON SETUP FOR RAB FUNCTION ROUTINE
0000
0000    ;++
0000    ;
0000    ;  RM$RSET
0000    ;  RM$RSET_ALT
0000    ;
0000    ;       this routine performs common setup for a rab function call
0000    ;       including the following:
0000    ;
0000    ;         1. call rm$rabchk to check arglist, set base regs
0000    ;         2. check for valid isi and set irab and ifab addr
0000    ;         3. check for stream idle and set to busy
0000    ;         4. clear the sts and stv fields of the rab
0000    ;         5. set asy irab bit from rab
0000    ;         6. store the arglist addr and caller's mode in the irab
0000    ;            and save sp entry value in imp$l_saved_sp
0000    ;         7. perform additional setups including checking fac for
0000    ;            operation and clearing find_last flag
0000    ;
0000    ;
0000    ; Calling sequence:
0000    ;
0000    ;   called via the $rabset macro which expands into:
0000    ;
0000    ;         bsbw    rm$rset
0000    ;         .byte   function_code
0000    ;
0000    ;  alternate entry at rm$rset_alt to perform functions  4, 5, 6, & 7 only.
0000    ;  r7, r8, r9, r10, and r11 must be set as per output prior to call.
0000    ;
0000    ;
0000    ; Input Parameters:
0000    ;
0000    ;         sp      stack pointer
0000    ;         ap      argument list addr
0000    ;
0000    ; Implicit Inputs:
0000    ;
0000    ;         the in-line 1-byte function code.
0000    ;         the contents of the rab
0000    ;
0000    ; Output Parameters:
0000    ;
0000    ;         r11     impure area address
0000    ;         r10     ifab address
0000    ;         r9      irab address
0000    ;         r8      rab address
0000    ;         r7      caller's mode
0000    ;         r0 thru r5 destroyed
0000    ;
0000    ; Implicit Outputs:
0000    ;
0000    ;         imp$l_saved_sp is set to the value of sp+4
0000    ;         the sts and stv fields of the rab are zeroed
0000    ;
0000    ; Completion Codes:
```

```
                     0000  ;
                     0000  ;          none.  if an error is detected returns to user (not caller)
                     0000  ;          after appropriate cleanup.  the user receives a standard
                     0000  ;          rms error code, in particular, isi, act, and those returned by
                     0000  ;          rm$rabchk.
                     0000  ;
                     0000  ;          if all o.k., returns to caller after the 1-byte
                     0000  ;          in-line function code.
                     0000  ;
                     0000  ; Side Effects:
                     0000  ;
                     0000  ;          none
                     0000  ;
                     0000  ;--
                     0000
                     0000  ;
                     0000  ;  entry point to rm$rset
                     0000  ;
                     0000  ;  validate rab and perform other basic setups
                     0000  ;
                     0000
                     0000  RM$RSET::
       FFFD'  30     0000             BSBW    RM$RABCHK                  ; valid rab? (exits if invalid)
                     0003
                     0003  ;
                     0003  ;          NOTE: SETS R11 TO IMPURE ADDR
                     0003  ;                r9 to isi
                     0003  ;                r8 to rab addr
                     0003  ;                r7 to caller's mode
                     0003  ;
                     0003  ;  get the irab address and check for a valid irab
                     0003  ;
                     0003
          0A  13     0003             BEQL    100$                               ; branch if isi value bad
     0F   59  B1     0005             CMPW    R9,#IMP$C_ENTPERSEG                ; simple isi case (in 1st segment)?
          0A  1A     0008             BGTRU   10$                                ; branch if so
59   64 AB49  D0     000A             MOVL    IMP$L_IRBTBLINK(R11)[R9],R9        ; get irab address
          0E  12     000F  100$:      BNEQ    5$                                 ; branch if irab allocated
        0094  31     0011             BRW     ERRISI                             ; error is irab not allocated
                     0014
                     0014  ;
                     0014  ;  convert isi value to irab address (general case)
                     0014  ;
                     0014
     50   07  D0     0014  10$:       MOVL    #IMP$L_IRABTBL/4,R0                ; irab table offset/4
       FFE6'  30     0017             BSBW    RM$GTIADR                          ; get irab addr
          F3  11     001A             BRB     100$                               ; continue
                     001C
        0090  31     001C  15$:       BRW     ERRBUG                             ; error...invalid irab
                     001F
0A      08 A9  91    001F  5$:        CMPB    IRB$B_BID(R9),#IRB$C_BID
          F7  12     0023             BNEQ    15$                                ; branch if valid irab
                     0025
                     0025  ;++
                     0025  ;
                     0025  ;  set r10 = ifab address
                     0025  ;
```

```
                           0025   205 ;--
                           0025   206
       5A   69       D0    0025   207           MOVL    IRB$L_IFAB_LNK(R9),R10            ; get ifab address
 0B     08  AA       91    0028   208           CMPB    IFB$B_BID(R10),#IFB$C_BID         ; really an ifab?
            EE       12    002C   209           BNEQ    15$
 67 6A      20       E0    002E   210           BBS     #IFB$V_BUSY,(R10),ERRACT          ; branch if ifab busy
                           0032   211
                           0032   212 ;++
                           0032   213 ;
                           0032   214 ;  set busy, checking if already active, and clear async and ppf_image flags
                           0032   215 ;
                           0032   216 ;--
                           0032   217
 6A 69      20       E2    0032   218           BBSS    #IRB$V_BUSY,(R9),ERRRSA           ; set busy, branch if busy already
                           0036   219
           00000004        0036   220           IRB$M_PPF_IMAGE = 1@<IRB$V_PPF_IMAGE-<IRB$L_BKPBITS*8>>
           00000008        0036   221           IRB$M_ASYNC     = 1@<IRB$V_ASYNC-<IRB$L_BKPBITS*8>>
                           0036   222
 04 A9      0C       8A    0036   223 20$:      BICB2   #IRB$M_PPF_IMAGE!IRB$M_ASYNC,IRB$L_BKPBITS(R9); clear flags
 57 68      1E       E0    003A   224           BBS     #RAB$V_PPF_IND+<RAB$W_ISI*8>,(R8),CHKIND; branch if indirect ppf
                           003E   225
                           003E   226 ;++
                           003E   227 ;
                           003E   228 ;  alternate entry from rms0conn here
                           003E   229 ;
                           003E   230 ;  clear rab$l_sts and rab$l_stv
                           003E   231 ;  set asynchronous flag if required and probe async arg list
                           003E   232 ;  store caller's mode and arglist addr in irab
                           003E   233 ;
                           003E   234 ;--
                           003E   235
                           003E   236 RM$RSET_ALT::
                           003E   237
                           003E   238           ASSUME  RAB$L_STV       EQ      RAB$L_STS+4
                           003E   239
         08 A8       7C    003E   240           CLRQ    RAB$L_STS(R8)             ; zero sts and stv in rab
                           0041   241
                           0041   242 ;
                           0041   243 ;  perform asynchronous setup
                           0041   244 ;
                           0041   245
                           0041   246           ASSUME  RAB$V_ASY       EQ      0
                           0041   247
      07 04 A8       E9    0041   248           BLBC    RAB$L_ROP(R8),50$         ; branch if sync
                           0045   249
                           0045   250           ASSUME  IMP$W_RMSSTATUS EQ      0
                           0045   251           ASSUME  IMP$V_IIOS      EQ      0
                           0045   252
         04 6B       E9    0045   253           BLBC    (R11),50$                 ; branch if this is a ppf forcing
                           0048   254                                             ; synchronous operation
                           0048   255
                           0048   256           SSB     #IRB$V_ASYNC,(R9)         ; flag async operation
                           004C   257
                           004C   258 ;
                           004C   259 ;  store caller's mode and arglist addr in irab
                           004C   260 ;
                           004C   261
```

```
                0A A9    57   90  004C   262 50$:      MOVB    R7,IRB$B_MODE(R9)          ; save caller's mode
                18 A9    5C   D0  0050   263           MOVL    AP,IRB$L_ARGLST(R9)        ; save pointer to arglist
                24 A9    58   D0  0054   264           MOVL    R8,IRB$L_LAST_RAB(R9)      ; save addr this rab
                                  0058   265
                                  0058   266 ;++
                                  0058   267 ;
                                  0058   268 ;  pick up in-line byte specifying optional functions and checking
                                  0058   269 ;
                                  0058   270 ;--
                                  0058   271
                51    00 BE   9A  0058   272           MOVZBL  @0(SP),R1                  ; get byte
                         1E   13  005C   273           BEQL    SAVESP                     ; branch if nothing to do
                04 51    04   E5  005E   274           BBCC    #4,R1,60$                  ; branch if no need to clr find_last
                                  0062   275
                                  0062   276 ;++
                                  0062   277 ;
                                  0062   278 ;  cflg (bit 4 set) - clear last-operation-was-a-find flag
                                  0062   279 ;
                                  0062   280 ;--
                                  0062   281
                                  0062   282           CSB     #IRB$V_FIND_LAST,(R9)
                                  0066   283
                                  0066   284 ;++
                                  0066   285 ;
                                  0066   286 ;  verify accessed for block i/o or not based on bio (bit 3) parameter
                                  0066   287 ;
                                  0066   288 ;--
                                  0066   289
             5B 51       03   E4  0066   290 60$:      BBSC    #3,R1,CHKBIO               ; branch if a block i/o function
                         05   E0  006A   291           BBS     #IFB$V_BIO,-               ; branch if file accessed
                   22 AA          006C   292                   IFB$B_FAC(R10),-           ;   for block i/o
                         47       006E   293                   RM$ERRIOP                  ;   (invalid operation)
                         27   E4  006F   294           BBSC    #IRB$V_BIO_LAST,-          ; this is not a block operation so
                   00 69          0071   295                   (R9),CHKFAC                ;   clear block i/o last
                                  0073   296
                                  0073   297 ;++
                                  0073   298 ;
                                  0073   299 ;  check for appropriate access for function
                                  0073   300 ;  (note: r1 now has bit offset to required fac access)
                                  0073   301 ;
                                  0073   302 ;--
                                  0073   303
             05 51       05   E0  0073   304 CHKFAC: BBS     #5,R1,SAVESP                        ; branch if flag says any fac ok
          41 22 AA       51   E1  0077   305         BBC     R1,IFB$B_FAC(R10),RM$ERRFAC         ; branch if needed access not on
                                  007C   306
       14 AB      5E     04   C1  007C   307 SAVESP: ADDL3   #4,SP,IMP$L_SAVED_SP(R11)           ; save stack entry value
                                  0081   308
                                  0081   309 ;+
                                  0081   310 ; Take lock on file if sharing and if not ISAM.
                                  0081   311 ;-
                                  0081   312
                   78 AA      D5  0081   313           TSTL    IFB$L_SFSB_PTR(R10)                ; are we sharing?
                         0C   13  0084   314           BEQL    10$                                ; no, no need to lock file
                23 AA    02   91  0086   315           CMPB    #IFB$C_IDX,IFB$B_ORGCASE(R10)      ; is this ISAM?
                         06   13  008A   316           BEQL    10$                                ; if so don't lock yet
                      FF71'   30  008C   317           BSBW    RM$RAISE_LOCK                      ; get lock on the file
                   13 50      E9  008F   318           BLBC    R0,ERROR                           ; get out on error
```

```
                    0092
                    0092  ;
                    0092  ;  bump return pc past the in-line function byte and return
                    0092  ;
                    0092
          6E   D6   0092  10$:    INCL    (SP)
               05   0094          RSB
                    0095
                    0095  ;++
                    0095  ;
                    0095  ;  this is an indirect operation on a ppf.  set ppf_image flag.
                    0095  ;
                    0095  ;--
                    0095
   A5 69  22   E3   0095  CHKIND: BBCS    #IRB$V_PPF_IMAGE,(R9),RM$RSET_ALT; say its indirect and branch
```

```
                 0099
                 0099  ;++
                 0099  ;
                 0099  ;  error returns
                 0099  ;
                 0099  ;--
                 0099
                 0099  ERRACT:
                 0099          RMSERR  ACT                     ; stream already active
      05    11   009E          BRB     ERROR
                 00A0
                 00A0  ERRRSA:
                 00A0          RMSERR  RSA                     ; record stream active
                 00A5
   FF58'    31   00A5  ERROR:  BRW     RM$EX_NOSTR
                 00A8
                 00A8  ERRISI:
                 00A8          RMSERR  ISI                     ; invalid isi value
      F6    11   00AD          BRB     ERROR
                 00AF
                 00AF  ;
                 00AF  ;  internal rms problem  -  irab table pointed to an invalid irab
                 00AF  ;                           or irab pointed to invalid ifab!
                 00AF  ;
                 00AF
                 00AF  ERRBUG: RMSTBUG FTL$_BADIFAB
                 00B6
                 00B6  ;++
                 00B6  ;
                 00B6  ;  entry point from rms$delete (attempted delete for seq. file org)
                 00B6  ;
                 00B6  ;--
                 00B6
                 00B6  RM$ERRIOP::
                 00B6          RMSERR  IOP                     ; wrong type of access re. bio
      05    11   00BB          BRB     ERROR1
                 00BD
                 00BD  RM$ERRFAC::
                 00BD          RMSERR  FAC                     ; not accessed for function
   FF3B'    31   00C2  ERROR1: BRW     RM$EXRMS                ; get out
                 00C5
```

```
                         00C5   377
                         00C5   378 ;++
                         00C5   379 ;
                         00C5   380 ;  file must be accessed to aliow block i/o
                         00C5   381 ;
                         00C5   382 ;--
                         00C5   383
 A9 22 AA     05    E0   00C5   384 CHKBIO: BBS     #IFB$V_BIO,IFB$B_FAC(R10),CHKFAC          ; branch if file accessed fo
 E7 22 AA     06    E1   00CA   385         BBC     #IFB$V_BRO,IFB$B_FAC(R10),RM$ERRIOP       ; branch if also not block
                         00CF   386                                                           ;  and record access
                         00CF   387 ;++
                         00CF   388 ;
                         00CF   389 ;  file is accessed for mixed block and record i/o
                         00CF   390 ;
                         00CF   391 ;  set the block i/o last flag and also set the 'switched between block
                         00CF   392 ;  and record i/o' flag if last operation was not a block i/o operation,
                         00CF   393 ;  else clear flag
                         00CF   394 ;
                         00CF   395 ;--
                         00CF   396
                         00CF   397         CSB     #IRB$V_BRO_SW,(R9)
    9C 69     27    E2   00D3   398         BBSS    #IRB$V_BIO_LAST,(R9),CHKFAC
    98 69     28    E3   00D7   399         BBCS    #IRB$V_BRO_SW,(R9),CHKFAC                 ; set bro_sw and branch
                         00DB   400
                         00DB   401         .END
```

```
$$.PSECT_EP                          = 00000000               RM$RABCHK                       ********    X   01
$$RMSTEST                            = 0000001A               RM$RAISE_LOCK                   ********    X   J1
$$RMS_PBUGCHK                        = 00000010               RM$RSET                         00000000 RG     01
$$RMS_TBUGCHK                        = 00000008               RM$RSET_ALT                     0000003E RG     01
$$RMS_UMODE                          = 00000004               RMS$_ACT                      = 0001825A
CHKBIO                                 000000C5 R       01    RMS$_FAC                      = 00018514
CHKFAC                                 00000073 R       01    RMS$_IOP                      = 00018574
CHKIND                                 00000095 R       01    RMS$_ISI                      = 00018584
ERRACT                                 00000099 R       01    RMS$_RSA                      = 000182DA
ERRBUG                                 000000AF R       01    SAVESP                          0000007C R      01
ERRISI                                 000000A8 R       01
ERROR                                  000000A5 R       01
ERROR1                                 000000C2 R       01
ERRRSA                                 000000A0 R       01
FTL$_BADIFAB                         = FFFFFFFD
IFB$B_BID                            = 00000008
IFB$B_FAC                            = 00000022
IFB$B_ORGCASE                        = 00000023
IFB$C_BID                            = 0000000B
IFB$C_IDX                            = 00000002
IFB$L_SFSB_PTR                       = 00000078
IFB$V_BIO                            = 00000005
IFB$V_BRO                            = 00000006
IFB$V_BUSY                           = 00000020
IMP$C_ENTPERSEG                      = 0000000F
IMP$L_IRABTBL                        = 0000001C
IMP$L_IRBTBLINK                      = 00000064
IMP$L_SAVED_SP                       = 00000014
IMP$V_IIOS                           = 00000000
IMP$W_RMSSTATUS                      = 00000000
IRB$B_BID                            = 00000008
IRB$B_MODE                           = 0000000A
IRB$C_BID                            = 0000000A
IRB$L_ARGLST                         = 00000018
IRB$L_BKPBITS                        = 00000004
IRB$L_IFAB_LNK                       = 00000000
IRB$L_LAST_RAB                       = 00000024
IRB$M_ASYNC                          = 00000008
IRB$M_PPF_IMAGE                      = 00000004
IRB$V_ASYNC                          = 00000023
IRB$V_BIO_LAST                       = 00000027
IRB$V_BRO_SW                         = 00000028
IRB$V_BUSY                           = 00000020
IRB$V_FIND_LAST                      = 00000025
IRB$V_PPF_IMAGE                      = 00000022
RAB$L_ROP                            = 00000004
RAB$L_STS                            = 00000008
RAB$L_STV                            = 0000000C
RAB$V_ASY                            = 00000000
RAB$V_PPF_IND                        = 0000000E
RAB$W_ISI                            = 00000002
RM$BUG                                 ********    X    01
RM$ERRFAC                              000000BD RG      01
RM$ERRIOP                              000000B6 RG      01
RM$EXRMS                               ********    X    01
RM$EX_NOSTR                            ********    X    01
RM$GTIADR                              ********    X    01
```

```
                                              +----------------+
                                              ! Psect synopsis !
                                              +----------------+

PSECT name                       Allocation          PSECT No.  Attributes
----------                       ----------          ---------  ----------
.  ABS  .                        00000000  (     0.)  00 (  0.)  NOPIC    USR   CON   ABS    LCL NOSHR NOEXE NORD   NOWRT NOVEC BYTE
RM$RMS0                          000000DB  (   219.)  01 (  1.)    PIC    USR   CON   REL    GBL NOSHR   EXE   RD   NOWRT NOVEC QUAD
$ABS$                            00000000  (     0.)  02 (  2.)  NOPIC    USR   CON   ABS    LCL NOSHR   EXE   RD     WRT NOVEC BYTE

                                           +------------------------+
                                           ! Performance indicators !
                                           +------------------------+

Phase                        Page faults    CPU Time       Elapsed Time
-----                        -----------    --------       ------------
Initialization                        30    00:00:00.10    00:00:00.98
Command processing                   115    00:00:00.71    00:00:04.55
Pass 1                               271    00:00:07.65    00:00:20.70
Symbol table sort                      0    00:00:01.04    00:00:01.69
Pass 2                                79    00:00:01.66    00:00:04.07
Symbol table output                    9    00:00:00.08    00:00:00.09
Psect synopsis output                  2    00:00:00.03    00:00:00.03
Cross-reference output                 0    00:00:00.00    00:00:00.00
Assembler run totals                 508    00:00:11.27    00:00:32.12

The working set limit was 1500 pages.
42299 bytes (83 pages) of virtual memory were used to buffer the intermediate code.
There were 40 pages of symbol table space allocated to hold 799 non-local and 11 local symbols.
401 source lines were read in Pass 1, producing 13 object records in Pass 2.
21 pages of virtual memory were used to define 20 macros.

                                          +----------------------------+
                                          ! Macro library statistics !
                                          +----------------------------+

Macro library name                        Macros defined
------------------                        --------------
_$255$DUA28:[RMS.OBJ]RMS.MLB;1                        11
_$255$DUA28:[SYS.OBJ]LIB.MLB;1                         1
_$255$DUA28:[SYSLIB]STARLET.MLB;2                      4
TOTALS (all libraries)                                16

904 GETS were required to define 16 macros.

There were no errors, warnings or information messages.

MACRO/LIS=LIS$:RMORSET/OBJ=OBJ$:RMORSET MSRC$:RMORSET/UPDATE=(ENH$:RMORSET)+EXECML$/LIB+LIB$:RMS/LIB
```

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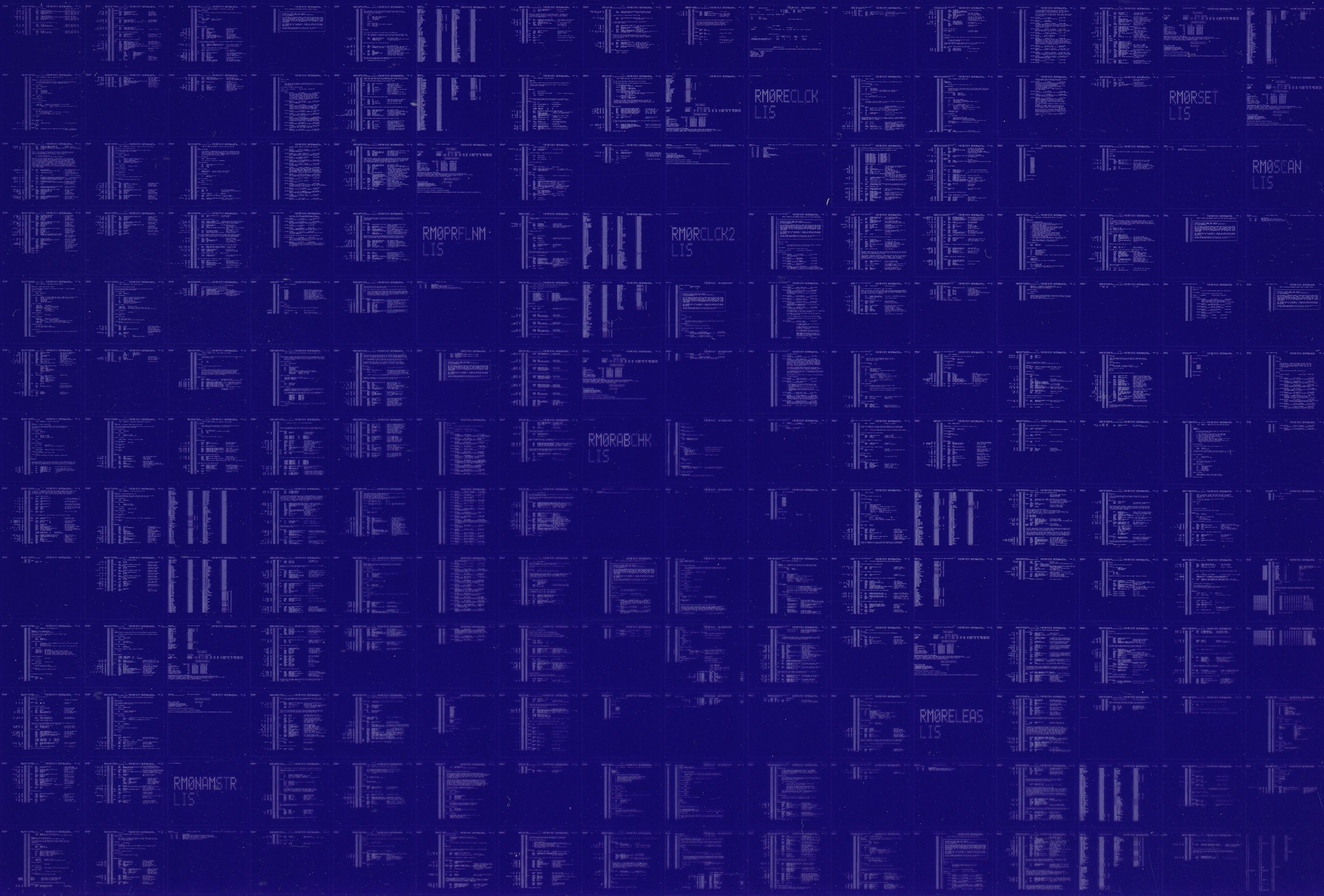

RM0RECLCK
LIS

RM0RSET
LIS

RM0SCAN
LIS

RM0PRFLNM
LIS

RM0RCLCK2
LIS

RM0RABCHK
LIS

RM0RELEAS
LIS

RM0NAMSTR
LIS